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EXAMINER

HOLMES, MICHAEL B

ART UNIT

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9

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/747,008

Applicant(s)

PARNELL, TODD C.

Examiner

Michael B. Holmes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on June 18 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.                      6) ☐ Other:



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## Examiner's Detailed Office Action

1. This action is responsive to application **09/747,008**, filed **August 31, 2000**.
2. **Claims 1-43** have been examined.

## Information Disclosure Statement

3. Examiner acknowledges applicants' submission of prior art and information disclosure. Nevertheless, applicant is respectfully remind of the ongoing Duty to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, by continuing to submitting in a timely manner PTO-1449, Information Disclosure Statement (IDS) with the filing of applicant's of application or thereafter.

## Drawings

4. The formal drawings have been reviewed by the United States Patent and Trademark Office of Draftperson's Patent Drawings Review.

## Specification Objection

5. Portions of the specification lacks clarify and is confusing e.g., last paragraph, page 9.

## Claim Interpretation

6. Office personnel are to give claims their “**broadest reasonable interpretation**” in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See \*also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) (“During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow. . . . The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed. . . . An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.”). *see* MPEP § 2106

## Common Knowledge Block

7. **file server** *n.* A file-storage device on a local area network (distributed system, LAN, WAN, or intranet), that is accessible to all users on the network, as opposed to a disk server, which appears to the users as a remote disk drive, a file server is typically a more sophisticated that not only stores files but manages them and maintains order as network users request files

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and updates i.e., makes changes to them. To deal with the tasks of handling multiple and even sometimes simultaneous request for files, a file server contains a processor and controlling software as well as a disk drive for storage. On LAN's a file server is often a computer with a large hard disk this is dedicated only to the task of managing shared files.

8. **attribute n.** 1. In a database record the name or structure of a field e.g., the files LAST-NAME, FIRSTNAME, and PHONE would be attributes of each record in a PHONELIST database. The size of a field or the type of information it contains would also be attributes of a data-record. 2. In screen displays, an element of additional information stored with each character in the video buffer of a video adapter running in character mode. Such attributes control the background and foreground colors of the character, underlining, and blinking. 3. In markup languages SGML and HTML, a name-value pair within a tagged element that modifies certain features of that element.

### Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 5-8, 27-43** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, "classifiers(1:M)" i.e., exactly what are we supposedly referring to, or more appropriately, what is this notation suppose to imply? Nevertheless, for the purposes of compact prosecution, examiner has attempted to interpret its meaning, with respect to the claim language. However, applicant will still need to distinct clarify or spell it out.

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11. **Claim 5-8, 27-43** recites the limitation "classifiers(1:M)" in the aforementioned claims.

However, there is insufficient antecedent basis for this limitation in the claim.

## Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

**(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.**

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

13. **Claims 1-43** are rejected under 35 U.S.C. 102(e) as being anticipated by

**Bowman-Amuah (USPN 6,332,163 B1)**, Filed: Sep. 01, 1999, Date of Patent: Dec. 18, 2001.

**Regarding claim 1:**

*Bowman-Amuah* teaches

- a method of providing an interface to a database, wherein the database includes a plurality of classifiers of data and data linked to at least one of the classifiers, the method comprising: organizing a set of the plurality of classifiers into a first hierarchical data structure according to a view established for a first client [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]; presenting data to the first client according the first hierarchical data structure [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]; organizing a second set of the plurality of classifiers into a second hierarchical data structure according to a view established for a second client; and presenting data to the second client according the second hierarchical data structure. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc..”)]

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**Regarding claim 2:**

the first hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]**]

**Regarding claim 3:**

the set of the plurality of classifiers contains less than the plurality of classifiers. [(FIG. 29; col. 112, line 04-29 “**Format the information. ... This function is responsible for formatting the collected information ... SQL queries (Information Access) are placed directly into the SQR program.”)]**

**Regarding claim 4:**

the first hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 Illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]**

**Regarding claim 5:**

*Bowman-Amuah teaches*



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- a method of presenting data in a database, wherein the database includes classifiers(1:M) of data and data linked to at least one of classifiers(1:M), wherein "M" is any positive number including 1, the method comprising: creating a view for a client, wherein the view organizes a set of the classifiers(1:M) into a hierarchical data structure according to characteristics of the client [(col. 31, line 12-65 "*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*")]; presenting data to the client according to the hierarchical data structure. [(col. 31, line 12-65 "*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*")]

**Regarding claim 6:**

the hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 "**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.**")]

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**Regarding claim 7:**

the database includes N classifiers and N is a number greater than M. [(col. 31, line 12-65

*“See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]*

**Regarding claim 8:**

the hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 *“FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ... IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]*

**Regarding claim 9:**

*Bowman-Amuah teaches*

- a method of presenting data in a database comprising: receiving a request from a client [(col. 244, line 3-7 *“FIG. 115 is an illustration of a Customer object 11500 in an object-based system 11502 streaming itself into a stream 11504, the stream 11504 being sent to a non-object system 11506, this stream 11504 being read and the information is inserted into a relational database 11508.”)]*; translating the request into

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database query [(col. 244, line 3-7 “FIG. 115 is an illustration of a Customer object 11500 in an object-based system 11502 streaming itself into a stream 11504, the stream 11504 being sent to a non-object system 11506, this stream 11504 being read and the information is inserted into a relational database 11508.”)]; producing a set of data according to the database query, the set of data organized in a hierarchical data structure; and presenting the set of data to the client. [(col. 244, line 3-7 “FIG. 115 is an illustration of a Customer object 11500 in an object-based system 11502 streaming itself into a stream 11504, the stream 11504 being sent to a non-object system 11506, this stream 11504 being read and the information is inserted into a relational database 11508.”)]

**Regarding claim 10:**

translating the request into a database query comprises: looking up the file handle in an Location table to obtain an ILocation; and formulating a database query to query a defined set of data, the query formulated from the ILocation. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 “illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 11:**

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formulating a database query to query a defined set of data comprises: determining if the ILocation contains bound classifiers, each bound classifier being bound by a constraining value [(col. 215, line 62 to col. 216, line 30 “FIG. 74 illustrates a customer server 7400 publicly announcing its interfaces 7402 ... The Client then “looks-up” an interface and establishes a connection to that interface.”)]; if the ILocation contains bound classifiers, adding a clause to the database query for each bound classifier in the ILocation, each clause formulated to eliminate data from the defined set of data that has a defined value corresponding to the constraining value of the bound classifier; determining if the ILocation contains unbound classifiers [(col. 215, line 62 to col. 216, line 30 “FIG. 74 illustrates a customer server 7400 publicly announcing its interfaces 7402 ... The Client then “looks-up” an interface and establishes a connection to that interface.”)]; if the ILocation contains unbound classifiers, adding a first clause to the database query for the first unbound classifier, the clause formulated to produce a listing of distinct values set for the defined set of data, the distinct values corresponding to the first unbound classifier, and further, adding a second clause to the database query for the first unbound classifier, the second clause formulated to select data from the set of defined data that has the value of the first unbound classifier not set to a value [(col. 215, line 62 to col. 216, line 30 “FIG. 74 illustrates a customer server 7400 publicly announcing its inter-faces 7402 ... The Client then “looks-up” an interface and establishes a connection to that interface.”)]; and if the ILocation does not contain unbound classifiers, adding a clause to the database query that selects all data in the defined set of data. [(col. 215, line 62 to col. 216, line 30 “FIG. 74 illustrates a customer server 7400 publicly announcing its interfaces 7402 ... The Client then “looks-up” an interface and establishes a connection to that interface.”)]

**Regarding claim 12:**

formulating a database query to query a defined set of data includes formulating an SQL query, comprising: determining if the ILocation contains bound classifiers, each bound classifier being bound by a constraining value [(col. 49, line 19-54“Oracle 7.3; Sybase SQL Server; Informix; IBM DB/2; Microsoft SQL Server“)]; if the ILocation contains bound classifiers, adding a WHERE clause with a condition to the SQL query for each bound classifier, wherein the condition of each WHERE clause is set to the constraining value corresponding to each bound classifier [(col. 49, line 19-54“Oracle 7.3; Sybase SQL Server; Informix; IBM DB/2; Microsoft SQL Server“)]; determining if the ILocation contains unbound classifiers [(col. 49, line 19-54“Oracle 7.3; Sybase SQL Server; Informix; IBM DB/2; Microsoft SQL Server“)]; if the ILocation contains unbound classifiers, adding a SELECT DISTINCT clause to the SQL query for the first unbound classifier and further adding a WHERE clause with a condition to the SQL query for the first unbound classifier, wherein the condition of the WHERE clause is set to NULL [(col. 49, line 19-54“Oracle 7.3; Sybase SQL Server; Informix; IBM DB/2; Microsoft SQL Server“)]; and if the ILocation does not contain unbound classifiers, adding a SELECT clause to the SQL query. [(col. 49, line 19-54“Oracle 7.3; Sybase SQL Server; Informix; IBM DB/2; Microsoft SQL Server“)]

**Regarding claim 13:**

producing a result using the database query, the result formatted according to the NFS protocol, comprises: querying the database with the database query that produces ILocations and files

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**[(col. 55, line 51-67 “Microsoft Index Server 1.1--allows for search of Web documents ...It also supports multiple file formats, including HTML, Word, Excel, PowerPoint, and PDF.”)];**

translating the ILocations into unique file handles; and storing the mapping from the unique file handles to the ILocations in an ILocation table. **[(col. 55, line 51-67 “Microsoft Index Server 1.1--allows for search of Web documents ...It also supports multiple file formats, including HTML, Word, Excel, PowerPoint, and PDF.”)]**

**Regarding claim 14:**

translating the ILocations into unique file handles comprises: translating the ILocations into single byte arrays **[(col. 75, line 24-28“UUcoding--process for converting 8-bit binary files into 7-bit ASCII files for transmission via e-mail over the Internet (the Internet only supports seven bit characters in e-mail messages); UUencode and UUdecode utilities on end nodes perform the conversion.”)];** cryptographically hashing the single byte arrays into small byte arrays **[(col. 75, line 24-28“UUcoding--process for converting 8-bit binary files into 7-bit ASCII files for transmission via e-mail over the Internet (the Internet only supports seven bit characters in e-mail messages); UUencode and UUdecode utilities on end nodes perform the conversion.”)];** and padding the small byte arrays with bits to make the small byte arrays the proper length of a file handle according to the NFS protocol. **[(col. 75, line 24-28“UUcoding--process for converting 8-bit binary files into 7-bit ASCII files for transmission via e-mail over the Internet (the Internet only supports seven bit characters in e-mail messages); UUencode and UUdecode utilities on end nodes perform the conversion.”)]**

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**Regarding claim 15:**

further comprising providing a file handle to a client upon an initial access request from the client, the file handle corresponding to a view in the database, wherein the view defines an amount of data in the database that is observable by the client. [(col. 256, line 14-48 “FIG. 133 illustrates a flowchart for a method 13300 for assigning a view to an activity. Notification is received that a startup event of an activity has occurred in operation 13302. A reference to a first instance of an object created by the startup event of the activity is also received in operation 13304.”)]

**Regarding claim 16:**

the view defines a directory structure observed by the client. [(col. 256, line 14-48 “FIG. 133 illustrates a flowchart for a method 13300 for assigning a view to an activity. Notification is received that a startup event of an activity has occurred in operation 13302. A reference to a first instance of an object created by the startup event of the activity is also received in operation 13304.”)]

**Regarding claim 17:**

*Bowman-Amuah* teaches

- a hierarchical display of data classification information, wherein the data classification information represents classifiers of data, the data is contained in at least one database, the data is at least a portion of all data contained in the at least one database, and each datum is classified by at least one classifier, the hierarchical dis-

display comprising: a graphical display of the data classification information, wherein the graphical display indicates a hierarchy of the classifiers of the data. [(col. 35, line 5-44 “Desktop Manager Services implement the desktop metaphor. The desktop metaphor as the name suggests is a style of user interface that tries to emulate the idea of a physical desktop allowing you to place documents on the desktop, launch applications by clicking on a graphical icon, or discard files by dragging them onto a picture of a waste basket. Most Window Systems contain elementary Desktop Manager functionality (e.g., the Windows 95 desktop), but often more user friendly or functional Desktop Manager Services are required.”)]

**Regarding claim 18:**

the hierarchy is selectable. [(col. 35, line 5-44 “Desktop Manager Services implement the desktop metaphor. The desktop metaphor as the name suggests is a style of user interface that tries to emulate the idea of a physical desktop allowing you to place documents on the desktop, launch applications by clicking on a graphical icon, or discard files by dragging them onto a picture of a waste basket. Most Window Systems contain elementary Desktop Manager functionality (e.g., the Windows 95 desktop), but often more user friendly or functional Desktop Manager Services are required.”)]

**Regarding claim 19:**

the graphical display is in the form of a directory tree-like display. [(col. 35, line 5-44 “Desktop Manager Services implement the desktop metaphor. The desktop metaphor as the name suggests



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*is a style of user interface that tries to emulate the idea of a physical desktop allowing you to place documents on the desktop, launch applications by clicking on a graphical icon, or discard files by dragging them onto a picture of a waste basket. Most Window Systems contain elementary Desktop Manager functionality (e.g., the Windows 95 desktop), but often more user friendly or functional Desktop Manager Services are required.”]*

**Regarding claim 20:**

the database is remotely disposed from a client system, the hierarchical display further comprising: a graphical display of the data classification information on a display of the client system. [(col. 35, line 5-44 “Desktop Manager Services implement the desktop metaphor. The desktop metaphor as the name suggests is a style of user interface that tries to emulate the idea of a physical desktop allowing you to place documents on the desktop, launch applications by clicking on a graphical icon, or discard files by dragging them onto a picture of a waste basket. Most Window Systems contain elementary Desktop Manager functionality (e.g., the Windows 95 desktop), but often more user friendly or functional Desktop Manager Services are required.”)]

**Regarding claim 21:**

further comprising: an active link associated with each classifier represented by the data classification information that allows display of the data that is associated with classifier. [(col. 35, line 5-44 “Desktop Manager Services implement the desktop metaphor. The desktop metaphor as the name suggests is a style of user interface that tries to emulate the idea of a

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*physical desktop allowing you to place documents on the desktop, launch applications by clicking on a graphical icon, or discard files by dragging them onto a picture of a waste basket. Most Window Systems contain elementary Desktop Manager functionality (e.g., the Windows 95 desktop), but often more user friendly or functional Desktop Manager Services are required.”]*

**Regarding claim 22:**

*Bowman-Amuah teaches*

- a method of providing hierarchical data classification information, wherein the data classification information represents classifiers of data, the data is contained in at least one database, the data is at least a portion of all data contained in the at least one database, and each datum is classified by at least one classifier, the method comprising: receiving a request for hierarchical data classifier information [(col. 58, line 53 to col. 59, line 52 “**FIG. 16** “*illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc..”)]]; generating the hierarchical database classification information; and providing the hierarchical database classification information. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16** “*illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc..”)]]**

**Regarding claim 23:**

generating the hierarchical database classification information comprises: translating the request into a database query; and producing a set of data according to the database query, the set of data organized in a hierarchical data structure. [(FIG. 29; col. 112, line 04-29 “*Format the information. ... This function is responsible for formatting the collected information ... SQL queries (Information Access) are placed directly into the SQR program.*”)]

**Regarding claim 24:**

translating the request into a database query comprises: looking up a file handle in an ILocation table to obtain an Ilocation [(col. 258, line 29 to col. 259, line 06 “*“Miscellaneous services” should not be interpreted as “less important services.” In fact, ... These facilities are mandatory when security, auditing and logging are considered essential properties of the environment.*”)]; and formulating a database query to query a defined set of data, the query formulated from the ILocation. [(col. 258, line 29 to col. 259, line 06 “*“Miscellaneous services” should not be interpreted as “less important services.” In fact, ... These facilities are mandatory when security, auditing and logging are considered essential properties of the environment.*” “)]

**Regarding claim 25:**

providing the hierarchical database classification information further comprises: providing the hierarchical database classification information in the form of a directory tree-like structure.

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[(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 26:**

providing the hierarchical database classification information further comprises: providing the hierarchical database classification information from a server system; the method further comprising: displaying the hierarchical database classification information with a client system.

[(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 27:**

*Bowman-Amuah* teaches

- a hierarchical data structure of a database, wherein the database includes classifiers(1:M) of data and data linked to at least one of the classifiers(1:M), wherein "M" is any positive number including, the hierarchical data structure generated by the method of creating a view for a client, wherein the view organizes a set of the classifiers(1:M) into a hierarchical data structure according to characteristics of the client [(col. 31, line 12-65 “See also FIGS. 11 and 12, which are detailed diagrams

*of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”]);*  
organizing data into the hierarchical data structure according to the set of the classifiers(1:M). [(col. 31, line 12-65 “See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]

**Regarding claim 28:**

the hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 29:**

the database includes N classifiers and N is a number greater than M. [(col. 31, line 12-65 “See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional

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*client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]*

**Regarding claim 30:**

the hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]**

**Regarding claim 31:**

*Bowman-Amuah teaches*

- a computer readable medium for providing an interface to a database, wherein the database includes classifiers(1:M) of data and data linked to at least one of classifiers(1:M), wherein "M" is any positive number including 1, the computer readable medium comprising a set of instructions for enabling a computer system to: organize a set of the classifiers(1:M) into a first hierarchical data structure according to a view established for a first client [(col. 31, line 12-65 “**See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]**; present data to the first client according the

first hierarchical data structure [(col. 31, line 12-65 “*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*”)]; organize a second set of the classifiers(1:M) into a second hierarchical data structure according to a view established for a second client [(col. 31, line 12-65 “*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*”)]; and present data to the second client according the second hierarchical data structure. [(col. 31, line 12-65 “*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*”)]

**Regarding claim 32:**

the first hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.**”)]

**Regarding claim 33:**

the database includes N classifiers and N is a number greater than M. [(col. 31, line 12-65 “See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]

**Regarding claim 34:**

the computer readable medium as recited in Claim 31, wherein the hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 35:**

the computer readable medium is selected from the group comprising: a hard disk drive, optical drive, floppy disk drive, compact disk, or electronic signals representing the instructions. FIG. 1



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**Regarding claim 36:***Bowman-Amuah teaches*

- an apparatus for providing an interface to a database, wherein the database includes classifiers(1:M) of data and data linked to at least one of the classifiers(1:M), wherein "M" is any positive number including 1, the apparatus comprising: means for organizing a set of the classifiers(1:M) into a first hierarchical data structure according to a view established for a first client [(col. 31, line 12-65 "*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*""]); means for presenting data to the first client according the first hierarchical data structure; means for organizing a second set of the classifiers (1:M) into a second hierarchical data structure according to a view established for a second client [(col. 31, line 12-65 "*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.*""]); and means for presenting data to the second client according the second hierarchical data structure. [(col. 31, line 12-65 "*See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and*

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*traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]*

**Regarding claim 37:**

the first hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare’s Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]

**Regarding claim 38:**

the database includes N classifiers and N is a number greater than M. [(col. 31, line 12-65 “See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]

**Regarding claim 39:**

the hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 “FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms

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*in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]*

**Regarding claim 40:**

*Bowman-Amuah teaches*

- a system for providing an interface to a database, wherein the database includes classifiers(1:M) of data and data linked to at least one of the classifiers(1:M), wherein "M" is any positive number including 1, the system comprising: a data processing system having a memory coupled to at least one processor, wherein the memory comprises instructions for enabling the data processing system to: organize a set of the classifiers (1:M) into a first hierarchical data structure according to a view established for a first client; present data to the first client according the first hierarchical data structure [(col. 225, line 34-67 “**FIG. 89 illustrates the manner in which the present invention uses a Globally Addressable Interface 8900 to obtain a Locally Addressable Interface 8902 to a specific Customer Object 8904. Note the steps set forth below.**”)]; organize a second set of the classifiers(1:M) into a second hierarchical data structure according to a view established for a second client [(col. 225, line 34-67 “**FIG. 89 illustrates the manner in which the present invention uses a Globally Addressable Interface 8900 to obtain a Locally Addressable Interface 8902 to a specific Customer Object 8904. Note the steps set forth below.**”)]; and present data to the second client according the second hierarchical data structure. [(col. 225, line 34-67 “**FIG. 89 illustrates the manner in which the present invention uses a**

*Globally Addressable Interface 8900 to obtain a Locally Addressable Interface 8902 to a specific Customer Object 8904. Note the steps set forth below.”)]*

**Regarding claim 41:**

the first hierarchical data structure is a file system directory tree structure. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]**

**Regarding claim 42:**

the database includes N classifiers and N is a number greater than M. [(col. 31, line 12-65 “**See also FIGS. 11 and 12, which are detailed diagrams of the components of the Netcentric Architecture Framework found in FIG. 10 ... The number of tiers in NCC and traditional client/server systems is different. NCC extends the traditional two-tier client/server architecture to a n-tier architecture.”)]**

**Regarding claim 43:**

the hierarchical data structure is a file system directory tree structure according to NFS. [(col. 58, line 53 to col. 59, line 52 “**FIG. 16 illustrates File Sharing services 1512. File Sharing services allow users to view, manage, read, and write files that may be located on a variety of platforms**

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*in a variety of locations ...IBM/Transare's Distribute File System (DFS)--a scaleable distributed file system that offers replication, security, etc.”)]*

## Conclusion

14. The prior art made of record and (listed of form **PTO-892**) not relied upon is considered pertinent to applicant's disclosure as follows. Applicant or applicant's representative is respectfully reminded that in process of patent prosecution i.e., amending of claims in response to a rejection of claims set forth by the Examiner per Title 35 U.S.C. The patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and any objections made. Moreover, applicant or applicant's representative must clearly show how the amendments avoid or overcome such references and objections. *See 37 CFR § 1.111(c).*

## Correspondence Information

15. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Michael B. Holmes** who may be reached via telephone at **(703) 308-6280**. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft)

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facsimile transmission the fax is (703) 746-7240. If attempts to reach the examiner by telephone are unsuccessful, the **Examiner's Supervisor, Anil Khatri**, may be reached at (703) 305-0282.

Any response to this office action should be mailed too:

**Director of Patents and Trademarks Washington, D.C. 20231.** Hand-delivered responses should be delivered to the Receptionist, located on the fourth floor of **Crystal Park II, 2121 Crystal Drive Arlington, Virginia.**

***Michael B. Holmes***

Patent Examiner

Artificial Intelligence

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United States Department of Commerce

Patent & Trademark Office



**ANIL KHATRI**  
**PRIMARY EXAMINER**